

Amendment
Serial No. 10/783,804

Docket 5000-1-526

REMARKS

Reconsideration of the above-identified application in view of the amendments to the claims and the following remarks is respectfully requested.

Claims 1-10 are rejected. Claims 1, 2, 5-6, 8, and 9 have been amended. Claim 7 has been canceled, and new claims 11-12 have been added. Claims 1 and 6 are independent claims. Claims 1-10 are pending.

The specification stands objected to for informalities. In response, applicants have amended the specification to clarify the term VOD as 'video on demand.' No new matter was added.

In regards to the term PHY, applicants believe that that term is adequately defined in the disclosure to one skilled in the art. For example, on page 6, line 17, the locations of the first and second PHY is disclosed with reference to FIG. 3. Moreover, on page 7, line 19, the operation of the first PHY is described as converting a RX signal generated by the second PD into a MII signal.

Therefore, applicants respectfully request withdrawal of this ground of objection.

Claim 6 stands objected to under 37 CFR § 1.75(c), as being improper dependent form for failing to further limit the subject matter of a previous claim. In response, applicants have converted dependent claim 6 to independent form.

Therefore, applicants respectfully request withdrawal of this ground of objection.

Claims 4-10 stand rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

Amendment
Serial No. 10/783,804

Docket 5000-1-526

which applicant regards as the invention.

In response, applicants note that the amendments to the claims have been corrected to overcome the section 112, second paragraph issues. In particular, applicants provided a clarification of the abbreviations used in sub-dependent claims in dependent claim 2 and 5. Dependent claim 5 was amended to reflect proper dependency and claim 9 was amended to define MII and MLT-3. Applicants respectfully submit that there is no need to provide definitions for such commonly used terms as TX, RX, FX or PHY (commonly found in Ethernet devices for digital access of the modulated link) as they are so commonly used in the art as they even appear in layman's literature without further definition. Accordingly, one skilled in the art would know what is meant by terms TX, RX, FX or PHY. However, in an attempt to clarify, the term "PHY" has been amended to recite "PHY device" throughout the claims.

Therefore, applicants respectfully request withdrawal of this ground of rejection.

New dependent claims 11-12 were added. Support for both claims is found in the specification and drawings (page 10, line 6 and page 9, line 6, FIG. 4). No new matter was added.

Claims 1 and 2 stand rejected under 35 USC § 102(b) as being anticipated by Bohn et al. (US 5,311,344). Additionally, claims 1-5 and 10 stand rejected under 35 USC § 103(a) as being unpatentable over Bohn et al. (US 5,311,344), in view of Farmer (US 7,146,104).

In response, have amended base claim 1 to incorporate features disclosed in dependent claim 7 and have canceled claim 7 and provide the following comments.

Claim 1, as amended, now recites, an optical subscriber network system

Amendment
Serial No. 10/783,804

Docket 5000-1-526

comprising, *inter alia*, a server bi-directional optical transmitter including, a first PHY device to convert the communication data received from the server photo diode into a media independent interface type (MII) signal; and an Ethernet switch couple to the first PHY device, the multiplexer and a second PHY device.

In contrast, Bohn et al. discloses a bi-directional lightwave transmission system which does not disclose a PHY device, a MII signal or Ethernet switch coupled to the first PHY device, the multiplexer and a second PHY device, as recited in amended base claim 1 or newly submitted base claim 6. Accordingly, Bohn fails to read on base claim 1 as amended.

Similarly, Farmer fails to teach or suggest a PHY, a MII signal or Ethernet switch, as recited in amended base claim 1 or newly submitted base claim 6. Accordingly, Farmer fails to read on base claim 1 as amended.

Moreover, Bohn alone or in combination with Farmer fail to suggest or teach a PHY, a MII signal or Ethernet switch, as recited in amended base claim 1. More specifically, the references fail to show transmitting both the broadcast signal and the communication signal, as recited in the base claim.

Therefore, applicants respectfully request withdrawal of both ground of rejection of base claim 1 as Bohn and Farmer fail to anticipate the present invention and also fail to teach or suggest the present invention as recited in base claim 1.

Claims 6-9 stand rejected under 35 USC § 103(a) as being unpatentable over Bohn et al. (US 5,311,344), in view of Farmer (US 7,146,104), as applied to claim 5 above, and further in view of Yamada et al. (US 2002/0118413 A1).

In response, have converted dependent claim 6 into independent form and provide

Amendment
Serial No. 10/783,804

Docket 5000-1-526

the following comments.

Claim 6, as amended now recites, an optical subscriber network system comprising: a subscriber bi-directional optical receiver including, an Ethernet switch . . . a first PHY device coupled to the demultiplexer to convert the communication data with a media independent interface type (MII type) into a TX signal, a second PHY device to convert the TX signal into a MII signal for the Ethernet switch, and to convert a MII signal from the Ethernet switch into a TX signal for to the subscriber laser diode; and a third PHY device for converting the MII signal into a multi level transmit-3 (MLT-3) signal

As noted above neither Bohn alone or in combination with Framer disclose a PHY, a MII signal or Ethernet switch, as recited in amended base claim 6.

As far as Yamada, applicants note that neither the Subscriber Media Converter 10, 70 or Station Media Converter 30, 80 in Yamada's FIG. 1 or 23 teach or suggest, a first PHY device coupled to the demultiplexer to convert the communication data with a media independent interface type (MII type) into a TX signal, a second PHY device to convert the TX signal into a MII signal for the Ethernet switch, and to convert a MII signal from the Ethernet switch into a TX signal for to the subscriber laser diode; and a third PHY device for converting the MII signal into a multi level transmit-3 (MLT-3) signal, as recited in amended claim 6. Yamada merely discloses two pairs of PHYs TX and FX in each converter 10, 70 and 30, 80 and fails to disclose an Ethernet switch.

Therefore, applicants respectfully request withdrawal of this ground of rejection.

The other claims in this application are each dependent from the independent

Amendment
Serial No. 10/783,804


Docket 5000-1-526

claim discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of the patentability of each on its own merits is respectfully requested.

For all the foregoing reasons, it is respectfully submitted that all the present claims are patentable in view of the cited references. A Notice of Allowance is respectfully requested.

Respectfully submitted,

Date: May 1, 2007


By: Steve S. Cha
Attorney for Applicant
Registration No. 44,069

Steve S. Cha, Reg. No. 44,069
Cha & Reiter, LLC
210 Route 4 East, #103
Paramus, NJ 07652
Telephone: (201) 226-9245
Facsimile: (201) 226-6246